

**HSS Independent Activity Report - Rev. 0****Report Number:** HIAR NNSS-2012-08-16**Site:** Nevada National Security Site**Subject:** Office of Enforcement and Oversight's Office of Safety and Emergency Management Evaluations Activity Report for Operational Awareness Oversight of the Nevada National Security Site**Dates of Activity :** 08/13/2012 - 08/16/2012**Report Preparer:** William Macon**Activity Description/Purpose:**

The purpose of this Office of Health, Safety and Security (HSS) activity was to perform an operational awareness site visit to observe Subcritical Experiment (SCE) activities at the U1a Complex, discuss ongoing activities at the Device Assembly Facility (DAF) and the National Criticality Experiment Research Center (NCERC), and monitor the status of other ongoing site activities at the Nevada National Security Site (NNSS) operated by National Security Technologies, LLC (NSTec).

**Result:**

1. The HSS site lead observed the following activities at U1a related to the GEMINI Castor SCE: U1a mode change, delivery of SCE from DAF to U1a, insertion of the SCE into U1a (acceptance of container, movement downhole, movement to the Zero Room, and mating with the Racklito), and timing and firing hookups of the SCE in the Zero Room. All observed activities were adequate and in compliance with site checklists and procedures.
2. In-place leak testing of the HEPA-Filtered Ventilation System at DAF is ongoing with satisfactory results. Corrective actions to date allow testing to meet established standards. Testing will continue into Fiscal Year 2013. Upon satisfactory completion of all testing, DAF may exit Justification for Continued Operation JCO-11-01, Revision 3.
3. NCERC and Los Alamos National Laboratory staffs have identified a digital relay component as the likely cause of reactor control system anomalies earlier this year in the *Planet* and *Flattop* critical assemblies. The digital relays will be replaced with electro-mechanical relays. A report is pending. Upon closeout of this issue, NCERC training on those assemblies may continue and the startup activities for the *Godiva* assembly may resume.
4. The site lead discussed with NNSS site office safety basis staff the need for NSTec to write a procedure for development and control of hazard analysis reports to support a contingency mission, as described in the DAF documented safety analysis, involving disposition of a damaged weapon. NSTec staff has acknowledged the issue and will add this action to a recently submitted caWeb issue on safety basis quality.

**HSS Participants**

1 (lead). William Macon

**References**Were there any items for HSS follow up?  Yes  No**HSS Follow Up Items**

1. Observe the GEMINI Pollux SCE shot and Zero Room re-entry, scheduled for early December 2012, as an operational awareness activity for the U1a Complex, thereby completing site lead observations of facility mode changes from Cold Standby to Active Operations and from Active Operations back to Cold Standby.
2. Monitor the progress of DAF and NCERC regarding items 2 and 3 above, and of NSTec regarding item 4 above.